

Bachelor of Science or Bachelor of Arts in Earth and Environmental Systems

2016-2017



The purpose of this program is to deliver a multidisciplinary education with environmental geosciences as a foundation, while also drawing upon existing courses from a diverse array of departments and programs. The emphasis spans local to global concerns. Core knowledge is developed through a set of required courses across multiple disciplines. The student then chooses one of three tracks composed of courses in Geosciences and related disciplines.

Curriculum Outline

The curriculum consists of two components: required Geosciences and cross-disciplinary core courses and required and elective courses in one of three cross-disciplinary tracks. Most students will be able to complete degree requirements (74-77 credits) and General Education requirements (minimum 36 credits) within the typical 120-credit, 4-year Bachelor's degree. (See university catalog for full description of degree)

Required Core Courses

The Required Core Courses provide a solid background within and beyond the Department of Geosciences. Environmental Systems include physical, biological, and human systems; thus, we require course work in geosciences, biological sciences, physical science, chemistry, and mathematics. Each track also includes related courses in the social sciences.

Cross-disciplinary Track Requirements

-BS in Environmental Systems: Upper division courses emphasizing environmental aspects of Geosciences and Biological Sciences, with supporting courses in Mathematics, Chemistry, Physics, and social sciences.

-BS in Geospatial Systems: Upper division geotechnologies courses in Geosciences and History, with supporting courses in Mathematics and social sciences.

-BA in Environmental Systems: Interdisciplinary coursework in Political Science, History, Economics, Sociology, Anthropology, and Philosophy

BS ENVIRONMENTAL SYSTEMS

GEOL 1100 or 1101	BIOL 1101(L)	MATH 1147			Choose 2 electives GEOL 4410 HIST 4430 POLS 4455 GEOL/HIST4471 HIST 4432 HIST 4485 POLS 4466 ANTH 4402 ECON 3352 PHIL 4455 SOC 3335 <u>Recommended</u> ENGL 3307 BIOL 3316
GEOL 1110	BIOL 1102(L)	MATH 1160 or MATH 1170	CHEM 1111(L)		
GEOL 3306 & GEOL 3315 & GEOL 4403	BIOL 2209(L)	MATH 3350	CHEM 1112(L)	PHYS 1111/1113 or PHYS 2211/2213	
<u>Choose 2</u> GEOL 4402(L) GEOL 4430 GEOL 4417(L) or other approved course	<u>Choose 2</u> BIOL 4416(L) BIOL 4462(L) BIOL 4489 GEOL 4490				
GEOL 4451 & GEOL 4416 & GEOL 4492					

BS GEOSPATIAL SYSTEMS

GEOL 1100 or 1101	BIOL 1101(L)	MATH 1147		GEOL 4403	<u>Recommended</u> ENGL 3307 <u>Choose 2 electives</u> GEOL 4410 HIST 4430 POLS 4455 GEOL/HIST 4471 HIST 4432 HIST 4485 HIST 4489 HIST 4490(L) POLS 4466 ANTH 4402 ECON 3352 PHIL 4455 SOC 3335
GEOL 1110	BIOL 1102(L)	MATH 1160 or MATH 1170	CHEM 1111(L)	GEOL 4404	
GEOL 3315 & GEOL 4406	BIOL 2209(L)	MATH 3350		GEOL 4407 & GEOL 4409	
GEOL 4416 & GEOL 4492				GEOL 4427 & GEOL 4428	
				<u>Choose 1</u> GEOL 4408 & GEOL 4480 GEOL 4481 GEOL 4482	

BA ENVIRONMENTAL SYSTEMS

GEOL 1100 or 1101	BIOL 1101(L)	MATH 1147		ECON 2201 <u>All</u> HIST 4430 POLS 4455 GEOL 4410 PHIL 4455 or PHIL 2250	<u>Recommended</u> ENGL 3307
GEOL 1110 & GEOL 2210	BIOL 1102(L)	MATH 1153 or MATH 3350	CHEM 1111(L)	ECON 2202	
GEOL 4403 & GEOL 3315 & GEOL 4406	BIOL 2209(L)			<u>Choose 1 methods</u> SOC 3308 POLS 4453 HIST 2291	
GEOL 4416 & GEOL 4492				<u>Choose 3 electives</u> POLS 2221 POLS 4408 POLS 4409 POLS 4453 GEOL/HIST 4471 HIST 4432. HIST 4485 HIST 4489 HIST 4490(L) POLS 4466 ANTH 4402 ECON 3352 SOC 3335 SOC 4491 or approved	